

STATEMENT OF BASIS (AI No. 43239)

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0097438 to discharge to waters of the State of Louisiana.

THE APPLICANT IS: Bayou Shrimp Processors, Inc.
P.O. Box 247
Delcambre, LA 70528-0247

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

PREPARED BY: Molly McKean

DATE PREPARED: May 21, 2008

1. PERMIT STATUS**A. Reason For Permit Action:**

Permit reissuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term

B. NPDES permit - NPDES permit effective date: N/A
NPDES permit expiration date: N/A

C. LPDES permits - LPDES permit effective date: December 1, 2003
LPDES permit expiration date: November 30, 2008

D. Date Application Received: April 25, 2008

2. FACILITY INFORMATION**A. FACILITY TYPE/ACTIVITY - shrimp processing facility**

Bayou Shrimp Processors, Inc. is an existing facility, located on 9818 J. Dooley Road, Delcambre, in Iberia Parish. The facility operations include washing, sorting, peeling, de-heading in small quantities, and packing of shrimp. The facility is capable of processing 150,000 lbs unprocessed shrimp/day (96,000 lbs after processing). Shrimp processing wastewater includes process wastewater from the peeling machines and wash tanks and washwater from the peeling machines and processing areas. These are filtered with a hydrocell screen then discharged by pipe directly to Bayou Carlin (Delcambre Canal). Sanitary wastewater, from the on-site sewerage treatment plant, is discharged by a separate pipe into Bayou Carlin. Solids (shrimp peels, legs, heads) are transported to an approved landfill application. During peak season (May-Nov), Bayou Shrimp Processors, Inc. averages 30, 18-hour, production days per month.

B. FEE RATE

1. Fee Rating Facility Type: minor
2. Complexity Type: II – BPJ points to 0 per administrative decision for seafood processors
3. Wastewater Type: II
4. SIC code: 2092

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C. LOCATION - 9818 J. Dooley Road, Delcambre, Iberia Parish
Latitude 29° 56' 57", Longitude 91° 58' 55"

3. OUTFALL INFORMATION

Outfall 001

Discharge Type: shrimp processing wastewater and stormwater
Treatment: hydrocell screen
Location: at the point of discharge from the wash wastewater drain pipe, located on south side of the facility, prior to combining with any other waters
Flow: 0.50 MGD
Discharge Route: directly to Bayou Carlin (Delcambre Canal)

Outfall 002

Discharge Type: treated sanitary wastewater
Treatment: mechanical treatment plant with chlorination
Location: at the point of discharge from the sewerage treatment plant prior to combining with any other waters
Flow: 0.0018 MGD
Discharge Route: directly to Bayou Carlin (Delcambre Canal)

4. RECEIVING WATERS

STREAM - directly to Delcambre Canal

BASIN AND SEGMENT - Vermilion-Teche River Basin, Segment 060902

DESIGNATED USES -
a. primary contact recreation
b. secondary contact recreation
c. propagation of fish and wildlife

5. TMDL STATUS

Subsegment 060902, Bayou Carlin (Delcambre Canal) - Lake Peigneur to Bayou Petite Anse (Estuarine), is not listed on LDEQ's Final 2006 303(d) list as impaired. However, subsegment 060902 was previously listed as impaired for suspended solids/turbidity/siltation and carbofuran for which the below TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDL's have been established for subsegment 060902:

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Suspended Solids/Turbidity/Siltation

As per the *TMDL for TSS, Turbidity and Siltation for the 15 Subsegments in the Vermilion River Basin* which was finalized on May 5, 2002, point sources do not represent a significant source of TSS as defined in this TMDL. Because effective policies are in place to limit TSS discharges, no specific reductions from point sources are required. Point sources discharge primarily organic TSS, which does not contribute to habitat impairment resulting from sedimentation. This TMDL only addresses the landform contribution of TSS/sediment and does not address the insignificant point source contributions.

As per the October 2000 LA TMDL Delist (Federal Register Notice: Vol. 66, Num. 66, pages 18087-18089, 4/5/2001), assessment of new data and information shows this segment is meeting water quality standards for turbidity. Therefore, requirements for turbidity will not be placed in this permit.

Carbofuran

According to the *TMDL for the Pesticide Carbofuran in the Mermentau and Vermilion Teche River Basins* which was finalized on March 21, 2002, there was one point source in the Vermilion-Teche (FMC Corp. LA0064360) but they did not discharge Carbofuran. Therefore, no allocation was given to point source discharges in the Vermilion-Teche River Basin for the pesticide Carbofuran. This facility is not expected to discharge pesticides.

6. PROPOSED EFFLUENT LIMITS

BASIS - See Rationale below.

No changes were made from the previous permit.

7. COMPLIANCE HISTORY/COMMENTS

A. OEC – There are no recent compliance inspections or enforcement actions on file. The company was issued a warning letter in 2004. They subsequently modified the permit to address production increases.

B. DMR Review/Excursions –

Date	Parameter	Outfall	Reported Value	Permit Limits
06/07	BOD ₅	002	46	30
06/07	BOD ₅	002	87	45
03/07	TSS	002	39	30

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8. EXISTING EFFLUENT LIMITS

Outfall 001

<i>Pollutants</i>	<i>Limitations</i>		<i>Frequency</i>
	Mo. Avg (lbs/day)	Daily Max (lbs/day)	
Flow	Report (MGD)	Report (MGD)	2/month
BOD ₅	3750	9450	2/month
TSS	1500	3750	2/month
Oil and Grease	240	600	2/month
pH	6.0 s.u. (minimum)	9.0 s.u. (maximum)	2/month

Outfall 002

<i>Pollutants</i>	<i>Limitations</i>		<i>Frequency</i>
	Mo. Avg (mg/L)	Weekly Avg (mg/L)	
Flow	Report (MGD)	Report (MGD)	1/month
BOD ₅	30	45	1/month
TSS	30	45	1/month
Fecal Coliform	---	400 colonies/ 100 ml	1/month
pH	6.0 s.u. (minimum)	9.0 s.u. (maximum)	1/month

9. ENDANGERED SPECIES

The receiving waterbody, Subsegment 060902 of the Vermilion-Teche River Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 24, 2007 from Boggs (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

10. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of

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Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

11. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

12. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation
Office of Environmental Services Public Notice Mailing List

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Rationale for Bayou Shrimp Processors, Inc.

1. **Outfall 001** - shrimp processing wastewater and stormwater (estimated flow is 0.5 MGD)

<i>Pollutants</i>	<i>Limitations</i>		<i>Reference</i>
	Mo. Avg (lbs/day)	Daily Max (lbs/day)	
Flow	Report (gpd)	Report (gpd)	LAC33:IX.2707.1.1.b
BOD ₅	3750	9450	(*1)
TSS	1500	3750	(*1)
Oil and Grease	240	600	(*1)
pH	6.0 s.u. (minimum)	9.0 s.u. (maximum)	(*1)

Treatment: Hydrocell Screening

Monitoring Frequency: 2/month for all parameters

Calculations for Mass-Loading Limits for Outfall 001

Guideline-based limits for Southern Non-Breaded Shrimp Processing in the Contiguous States per 40 *CFR* 408 Subpart L promulgated December 1, 1975; New Source Performance Standards apply.

Calculations are based on pounds of raw shrimp, prior to processing, per day.

NSPS Limit Calculations

Monthly Average Limits

BOD₅ = (25 lbs/ 1000 lbs seafood) x (150,000 lbs seafood/day) = 3750 lbs/day

TSS = (10 lbs/ 1000 lbs seafood) x (150,000 lbs seafood/day) = 1500 lbs/day

Oil & Grease = (1.6 lbs/ 1000 lbs seafood) x (150,000 lbs seafood/day) = 240 lbs/day

Daily Maximum Limits

BOD₅ = (63 lbs/ 1000 lbs seafood) x (150,000 lbs seafood/day) = 9450 lbs/day

TSS = (25 lbs/ 1000 lbs seafood) x (150,000 lbs seafood/day) = 3750 lbs/day

Oil & Grease = (4.0 lbs/ 1000 lbs seafood) x (150,000 lbs seafood/day) = 600 lbs/day

Limits Justification:

This facility was not given seasonal limits in the original LPDES permit. This permit does not include seasonal limits.

Flow: Reporting of the volume of effluent discharged from each outfall is required by LAC33:IX.2707.1.1.b

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BOD₅, Oil & Grease, and pH: Effluent mass-loading limits based on EPA Guidelines for Southern Non-Breaded Shrimp Processing in the Contiguous States. Seafood is defined as raw material, including freshwater and saltwater fish and shellfish, to be processed, in the form which it is received at the processing plant, as per 40 CFR 408.125.c.

TSS: Per the TMDL for TSS, Turbidity, and Siltation for the 15 Subsegments in the Vermilion River Basin, point source loads are so small as to be insignificant. Point sources discharge primarily organic TSS, which does not contribute to habitat impairment from sedimentation. The TMDL addresses only landform contribution of TSS/sediment, not the insignificant point source contributions. Therefore, technology-based limits have been calculated for this Outfall based on 40 CFR 408.125.c

(*1) 40 *CFR* 408 Subpart L

NSPS New Source Performance Standards
su Standard Units

There shall be no discharge of floating solids or visible foam in other than trace amounts.

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2. **Outfall 002** – treated sanitary wastewater (estimated flow is 0.0023 MGD)

<i>Pollutants</i>	<i>Limitations</i>		<i>Reference</i>
	Mo. Avg (mg/L)	Weekly Avg (mg/L)	
Flow	Report (gpd)	Report (gpd)	LAC33:IX.2707.I.1.b
BOD₅	30	45	(*1), (*2)
TSS	30	45	(*1), (*2)
Fecal Coliform	---	400 colonies/ 100 ml	(*1), (*2)
pH	6.0 s.u. (minimum)	9.0 s.u. (maximum)	(*1), (*2)

Treatment: treatment plant with airlift skimmer, sludge return and chlorinator

Monitoring Frequency: 1/month for all parameters. BPJ based on previous permit.

Limits Justification:

Flow: Reporting of the volume of effluent discharged from each outfall is required by LAC33:IX.2707.I.1.b

BOD₅, TSS, Fecal Coliform: These limits were carried forward from the previously issued LPDES permit.

pH: Reporting pH of effluent discharge is required by LAC 33:IX.1113.C.1.

(*1) BPJ, previously issued LPDES permit LA0097438

(*2) Class I Sanitary General Permit LAG53000

su Standard Units

STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT

A SWP3 is included in the permit because in accordance with LAC 33:IX.2511.A.1, storm water discharges shall not be required to obtain an LPDES permit "... except... discharges associated with industrial activity." In accordance with LAC 33:IX.2511.B.14.a-k, facilities classified as SIC code 2092 are considered to have storm water discharges associated with industrial activity.

The SWP3 shall be prepared, implemented, and maintained within (6) months of the effective date of the final permit. The plan should identify potential sources of storm water pollution and ensure the implementation of practices to prevent and reduce pollutants in the storm water discharges associated with industrial activity at the facility (see Narrative Requirements for the AI).